

## ABSTRACT OF THE DISCLSOUR

A wave energy converter (WEC), for use in a body of water of depth  $D_w$ , includes a tubular structure and a piston within the tubular structure where the relative motion between the piston and the tubular structure is used to generate electric power. The length ( $L$ ) of the tubular structure may be selected to have a predetermined value based on the fact that: (a) the efficiency of the power generated by WEC increases as the length "L" of the tubular structure increases from a minimal value until  $L$  reaches an optimal value; and (b) the efficiency decreases as  $L$  is increased beyond the optimal value due to the increased mass of the water that the tubular structure and the piston have to move.